## CLAIMS

- 1. A peptide capable of being a diagnostic marker for Alzheimer's disease, the peptide being obtained by cleaving an N-terminal regionand a C-terminal region of Alcadein  $\alpha$ , Alcadein  $\beta$ , or Alcadein  $\gamma$ .
- 2. The peptide according to claim 1, wherein the N-terminal region to be cleaved is a portion of an extracellular domain at the N-terminal.
- 3. The peptide according to claim 1 or 2, wherein the C-terminal regionis cleaved by presentilin.
- 4. The peptide according to claim 1, wherein the peptide is obtained by cleaving an N-terminal and a C-terminal regions of Alcadein  $\alpha$ ; and the cleavage site of the N-terminal regionis between amino acids 815 and 816, amino acids 820 and 821, or amino acids 838 and 839 of the amino acid sequence represented by SEQ ID NO: 1.
- 5. The peptide according to claim 1 or 2, wherein the peptide is obtained by cleaving an N-terminal and a C-terminal regions of Alcadein  $\alpha$ ; and the cleavage site of the C-terminal regionis between amino acids 842 and 843, amino acids 843 and 844, or amino acids 851 and 852 of the amino acid sequence represented by SEQ

ID NO: 1.

- 6. The peptide according to claim 1, the peptide consisting of an amino acid sequence represented by any one of SEQ ID NOS: 4 to 12.
- 7. A method for collecting data for diagnosing Alzheimer's disease, the method comprising a process of detecting or quantitatively determining the peptide according to any one of claims 1 to 6 in body fluid or tissues taken from an animal.
- 8. The method for collecting data for diagnosing Alzheimer's disease according to claim 7, wherein the body fluid is blood or cerebrospinal fluid.
- 9. The method for collecting data for diagnosing Alzheimer's disease according to claim 7 or 8, wherein the ratio of a high-molecular-weight peptide to the detected or quantitatively determined peptide is used as an indicator for diagnosing Alzheimer's disease.
- 10. A method for diagnosing Alzheimer's disease, the method comprising a process of detecting or quantitatively determining the peptide according to any one of claims 1 to 6 in body fluid or tissues taken from an animal.

- 11. The method for diagnosing Alzheimer's disease according to claim 10, wherein the body fluid is blood or cerebrospinal fluid.
- 12. The method for diagnosing Alzheimer's disease according to claims 10 or 11, wherein the ratio of a high-molecular-weight peptide to the detected or quantitatively determined peptide is used as an indicator for diagnosing Alzheimer's disease.
- 13. A method for screening a therapeutic agent for Alzheimer's disease, the method comprising the steps of contacting cells secreting the peptide according to any one of claims 1 to 6 with an agent to be screened; and determining a change in the secreted amount of the peptide or a change in the molecular species of the secreted peptide.
- 14. An antibody against the peptide according to any one of claims 1 to 6.
- 15. A diagnostic reagent for Alzheimer's disease, the reagent comprising the antibody according to claim 14.